# Swarup Srinivasan

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#### **EDUCATION**

University of Toronto, Honors Bachelor of Science

Sep 2018 - Apr 2022 (Expected)

Computer Science Co-op, Entrepreneurship Stream, 4th year

CGPA: 3.82 / 4.0 - Dean's List of Academic Excellence

Teaching Assistant: Software Engineering (CSCC01), Operating Systems (CSCC69)

World topper of Computer Science, Cambridge International A levels

#### **SKILLS**

Languages: Python, Java, C++, C, HTML, CSS, JavaScript, WebAssembly, SQL

Frameworks: React, React Native, Flutter, Spring Boot, Pandas, Spark, TensorFlow, Keras, scikit-learn
Concepts: REST APIs, Multithreading, Agile methods (SCRUM, Test Driven Development), CI/CD

• Tools: Git, Jira, Microsoft Azure Cloud, Figma

## **EXPERIENCE**

Amazon - Incoming Software Development Engineer Intern

May 2021 - Aug 2021

## BlackBerry - Software Developer Intern

Sep 2020 - Dec 2020

- Developed a tool using WebAssembly to compile and execute a large analysis engine in-browser efficiently
- Debugged and fixed critical issues in multithreaded threat analysis engine used by 10+ applications using C#
- Increased efficiency of a vehicle simulation dashboard by 50% by using sensor data, and revamping the UI/UX
- Built a data conversion tool using Apache Thrift RPC framework in Python to implement client-server networking

## University of Toronto - Machine Learning Engineer Intern

Jan 2020 – Apr 2020

- Led development of tool to predict job salaries with 86% accuracy by using natural language processing to build machine learning models with TensorFlow, Python on Azure Cloud distributed systems
- Reduced REST API deployment time by 67% by optimizing pipeline using Docker and Kubernetes
- Presented report interface built with HTML, CSS, JavaScript to team of 7 non-technical HR managers
- Decreased MySQL query time by 15 minutes by creating module to automate query generation

## Google Developer Student Club - Software Developer

Jan 2020 - Jun 2020

Increased essential resource accessibility by 10%, by creating a cross-platform mobile app in a team of 4 using
Flutter to provide offline access to resources such as local food banks and homeless shelters, with SMS (GitHub)

# **PROJECTS**

#### Fitmotiv - (GitHub, Devpost)

Jan 2021

- Mobile app to bring people together via exercise. Won best use of Google Cloud at Hack the North 2020++
- Technology: Express, CockroachDB, Swift, Google Cloud API, Vonage API, IBM NLU API

# Virtual Queue Manager - (Website, GitHub)

Jun 2020 - Aug 2020

- Website to manage store queues with store searching and analytics, real-time queue monitoring, QR validation
- Technology: MongoDB, Express, React, Node.js, Google Maps API

## Escape Room Game - (GitHub)

Jun 2020 - Present

- Escape room puzzle game with a ray-casting 'grabbing' system for players to move objects and escape the room
- Technology: C++, Unreal Engine

# Spotify API Clone – (GitHub)

Feb 2020

- REST API for a music player created using microservices to friend/follow users, like songs, create playlists, etc.
- Technology: Java, Spring Boot, MongoDB, Neo4j

## Secure File Transfer System – (GitHub)

May 2019 - Aug 2019

- System for secure file transfer from server to clients. Handles concurrent requests with 0% degradation in speed
- Technology: C, sockets, I/O multiplexing, UNIX